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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,635	11/05/2002	Israel Morejon	1413.03	5964

21901 7590 05/30/2003

SMITH & HOPEN PA  
15950 BAY VISTA DRIVE  
SUITE 220  
CLEARWATER, FL 33760

EXAMINER

TRAN, KHAI

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 05/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/065,635

Applicant(s)

MOREJON ET AL.

Examiner

KHAI TRAN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-28 and 53-58 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 12, 13, 17-20, 30-33, 37, 41, 42 and 46-49 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9-11, 14-16, 21-23, 34-36, 38-40, 43-45 and 50-52 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1. The amendment A filed 3/12/03 has been entered. Claims 1-58 are pending in this Office action.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 8, 12-13, 17-20, 30-33, 37, 41, 42, 46, 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogami et al (U.S. Pat. 6,430,171) in view of Fertner (U.S. Pat. 6,185,251).

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lt Regarding claims 1-4, <sup>Ogami et al</sup> ~~Strait~~ discloses an improved initialization method for a communication system comprising the steps of: estimating a timing offset utilizing correlation with an entire received DTM frame (see abstract). <sup>Ogami et al</sup> ~~Strait~~ fails to disclose a step of estimating a channel impulse response utilizing at least one pilot tone, wherein the received DMT frame further comprises that a least one pilot tone.

Regarding claim 8, Fertner discloses the step of estimating the channel impulse response utilizing a maximum mean-square error (MMSE) criterion through the pilot tones (col. 14, lines 19-49).

Fertner discloses a step of estimating a channel impulse response utilizing at least one pilot tone, wherein the received DMT frame further comprises that a least one pilot tone (see abstract, and col. 2, lines 24-57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to estimate the channel impulse response from a receiver as taught by Fertner into the teachings of Ogami et al for adjusting on the basis of measurements of a channel's characteristics.

Claims 12-13 are similar to claim 1. Therefore, claims 12-13 are rejected under a similar rationale.

Claims 17-20 are similar to claims 1, 3-4 and 8. Therefore, claims 17-20 are rejected under a similar rationale.

Claims 30-33 are similar to claims 1-4. Therefore, claims 30-33 are rejected under a similar rationale.

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Claim 37 is similar to claim 8. Therefore, claim 37 is rejected under a similar rationale.

Claim 41 is similar to claim 1. Therefore, claim 41 is rejected under a similar rationale.

Claim 42 is similar to claim 3. Therefore, claim 42 is rejected under a similar rationale.

Claim 46 is similar to claim 17. Therefore, claim 46 is rejected under a similar rationale.

Claims 47-49 are similar to claims 3-4, 8. Therefore, claims 47-49 are rejected under a similar rationale.

#### ***Allowable Subject Matter***

4. Claims 24-28, 53-57, and 58 are allowed.

5. Claims 5-7, 9-11, 14-16, 21-23, 34-36, 38-40, 43-45, 50-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Dahlman et al (U.S. Pat. 5,991,330) disclose a mobile station synchronization within a spread spectrum communication systems.

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6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
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**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**or:**

(703) 308-6743, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to **Khai Tran** whose telephone number is **(703) 305-1876**.  
The examiner can normally be reached on Monday-Thursday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, **Chi Pham**, can be reached on **(703) 305-4378**.

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the Group receptionist whose telephone number is  
**(703) 305-4900**.



**Khai Tran**  
**Patent Examiner**

**KT**  
**May 28, 2003**